UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region I - EPA New England

Drafted Date: May 25, 2014
Finalized Date: May 27, 2014
SUBJECT: Partial Compliance Evaluation of Exxon in East Providence, RI

FROM: Elizabeth Kudarauskas, Environmental Engineer, Air Technical Unit EAK

THRU: Christine Sansevero, Senior Enforcement Coordinator, Air Technical Unit CMS 5/27/14

TO: File

I. Facility Information
A. Facility Name: Exxon
B. Facility Location: 1001 Wampanoag Trail, East Providence, RI
C. Facility Mailing Address: same
D. Facility Contact: Mike Sullivan, Terminal Supervisor
E. Type of Source (major/minor/sm/sm80): major
F: Date Title V permit issued: NA
G: AFS #: 4400700016

II Background Information
A. Date of inspection: April 24, 2014
B. Weather Conditions: mostly sunny, windy, temperature approximately 48 degrees
C. US EPA Representative(s):
Beth Kudarauskas, Air Tech Unit, OES
Bill Osbahr, OEME
Mike Looney, OEME
D. State Representative(s):
Karen Peltier, RI DEM
Doug McVay, RI DEM

III Purpose of Inspection
The purpose of this inspection was to conduct a focused leak detection and repair inspection and monitor pressure at the facility loading rack. The facility granted access to EPA's Geospatial Monitoring of Air Pollution (GMAP) vehicle.

IV Facility Description

A. Company / Facility History
The Exxon Terminal in Providence, RI ("Exxon") is a petroleum storage and distribution terminal. In addition to other products such as home heating oil, Exxon stores and distributes gasoline. The terminal is equipped with a vapor recovery unit to control emissions from the storage and distribution of gasoline.

B. Corporate Structure and CEO/President/owner name and mailing address
NA

C. Number of Employees and Working Hours
NA

V Inspection
A. Entry
The EPA inspectors arrived unannounced at the Exxon Terminal facility located on Wampanoag Trail in East Providence, RI. The EPA inspectors (Ms. Kudarauskas, Mr. Looney, and Mr. Osbahr) showed their credentials to Mr. John Andrade, the Terminal Manager.

B. Opening Conference
Ms. Kudarauskas led a very brief opening conference. She explained that the focus of the inspection was to monitor Exxon's loading rack and pressure vacuum relief vent (PVRV) for leaks and/or excess emissions. In addition, Mr. Osbahr discussed the monitoring equipment that he planned to use, including the forward looking infra-red (FLIR) camera and pressure gauge.

Ms. Kudarauskas also told Mr. Andrade that the GMAP vehicle was in the area. She described the vehicle to Mr. Andrade so he would recognize the vehicle. Mr. Andrade granted permission the GMAP vehicle to enter the Exxon facility.

C. Plant Walkthrough
Mr. Andrade reviewed basic safety procedures for the loading rack area and then led the inspectors to the facility loading rack. Mr. Andrade stayed at the loading rack with the inspectors that were connecting the pressure gauge to trucks. Mr. Andrade directed the inspectors to the other side of the loading rack to monitor the PVRV using the FLIR.

Mr. Osbahr had facility personnel attach the pressure monitoring coupling to the vapor hose on a truck in Bay 3. Mr. Looney used the FLIR camera to observe any leaks in the facility vapor collection system. When the truck began loading product, Mr. Looney observed the facility PVRV using the FLIR. Vapors were not detected from the PVRV using the FLIR. The maximum pressure observed during truck loading was 5 inches water in Bay 3.

Mr. Looney then observed trucks at the loading rack using the FLIR. Vapors were not detected

from the loading rack using the FLIR.

When the GMAP vehicle arrived at the Global facility, Mr. Andrade led the vehicle through the Exxon tank farm.

The GMAP vehicle consists of sophisticated electronic air monitoring and meteorological equipment that is mounted on an existing SUV or mini-van. Specifically, the GMAP unit consists of: laser absorption technology in the form of an integrated cavity output spectrometer (ICOS) for methane and carbon dioxide measurements; a differential ultraviolet absorption spectrometer (DUVAS) for benzene, toluene, ethylbenzene, and xylene (BTEX) measurements; a global positioning system (GPS); a compact weather station; an anemometer; and a collection station for air canister sampling located in a mobile vehicle.

It was driven past locations in the tank farm and loading rack to evaluate pollutant concentrations emanating from these sources. A forward looking infrared (FLIR) camera was also used as a screening tool to look for equipment leaks.

D. Closing Conference

The inspectors conducted a brief closing conference at the end of the inspection. Ms. Kudarauskas reviewed the inspection findings including the results of the pressure and leak monitoring. Ms. Kudarauskas informed Mr. Andrade that the PVRV was not releasing vapors at the time of the inspection as indicated by the FLIR camera. Mr. Andrade stated that the PVRV is monitored monthly using a LEL meter and was replaced last month.

The inspectors thanked Mr. Andrade for his time.